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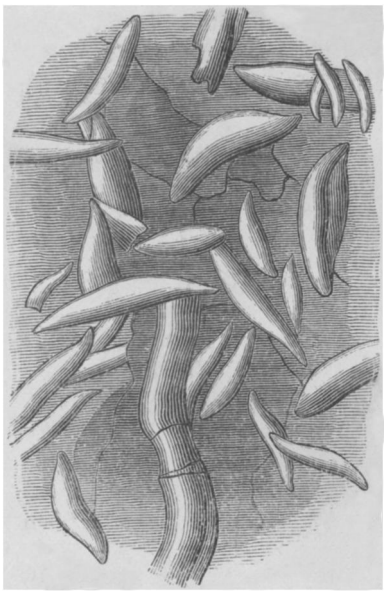
NOVEMBER 24, 1879.

ON A NEW FUCOIDAL PLANT FROM THE TRIAS.

BY HENRY CARVILL LEWIS.

The fossil described here as *Palæophycus limaciformis, sp. nov.*, is from a very beautiful and well-defined specimen, casts of which stand out in relief upon a slab of Triassic sandstone. It was found by the writer near Milford, New Jersey, in upper Triassic strata. Its general facies is like that of some species of *Palæophycus* and *Astrophycus* of the Carboniferous age, and of *Buthotrephis* of the Clinton group, and it belongs to the same order of plants—that of the fucoid or marine algæ. The general, rather than generic name of *Palæophycus*, which is quite as indefinite as that of *Fucoides*, is well applicable to it.

The frond is cylindrical and jointed. The ramuli, or short branches of the frond are fleshy, tubular, elongated bodies of about an inch in length. They are spindle-shaped, attenuate, and more or less curved at both ends. They are very frequently aggregated in bunches of three or more, radiating from a common point of growth, and are generally detached from the main frond. The form of these bodies is characteristic of the plant, being distinctly *snail-shaped;* hence its specific name, "*limaciformis.*"



Nat. Size.
Palæophycus limaciformis Lewis, sp. nov.

At the locality where it was found there also occur specimens of ripple-marked sandstone, also of rain-prints and mud-cracks. These show the physical conditions under which the plant grew—that of mudflats in shallow water frequently left exposed to sun and rain. The rain-prints have been compared with

modern rainprints made in mud, and their great similarity noticed. One specimen of a fucoid found here has apparently been so confused and distorted by the beating of a heavy rain-storm that its structure can scarcely be recognized.

Fucoids of somewhat similar appearance have been described from more ancient geological horizons, but not, so far as can be learned, from the Trias. The occurrence of a plant which has the characters of marine algæ in a formation supposed to have been deposited by fresh water is interesting.

Postscript.—Since the above paper was presented, a photograph of this fossil has been sent to Mr. Leo Lesquereux, the distinguished paleobotanist, who, in a letter to the writer, says: "Your plate represents what I consider a new species of *Palæophycus*, whose analogy is with *P.* (species undetermined) Hall, Paleont. of N. Y., vol. i, Pl. 70 (Hudson River group); also distantly related to *Fucoides auriformis* and especially *F. heterophyllus*, same author, l. c., ii, Pl. 3, figs. 3, 4. You may also find a kind of analogy to what Hall considers and figures as roots or also as stems of some marine plants, same vol., Pl. 8, figs. 4, 5, and pl. 9, fig. 4, and also pl. 10, figs. 5, 7 (all Clinton plants). The type is evidently old, rather Devonian, even upper Silurian. European authors have nothing like this from the Trias, Jurassic, Cretaceous or Eocene."